## Department of Mathematics, BGU

## BGU Probability and Ergodic Theory (PET) seminar

On Thursday, May, 13 2021

At 11:10 - 12:00

In Online

Faustin Adiceam (The University of Manchester)

will talk about

## Around the Danzer problem and the construction of dense forests.

Abstract: The still open Danzer problem (1965) asks for the existence of a set with finite density intersecting any convex body of volume one. It has so far attracted a considerable number of ideas revolving around many dffierent areas (ergodic theory, probability, dynamical systems, Diophantine approximation, harmonic analysis, the theory of quasicrystals...).

After surveying the state of the art in this problem, we will focus our attention on the construction of so-called dense forests. These are discrete point sets emerging from the weakening of the volume constraint in Danzer's question. The emphasis will be put on the effectiveness of such construction.

Based on joint work with Yaar Solomon and Barak Weiss.

**Please Note the Unusual Place!**